01-0866

SDMS # 236662

GE
159 Plastics Avenue
Pittsfield, MA 01201
USA

Transmitted Via Overnight Delivery

July 13, 2005

Mr. William P. Lovely, Jr.
U.S. Environmental Protection Agency
EPA New England (MC HBO)
One Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Re: GE-Pittsfield/Housatonic River Site
Floodplain Residential and Non-Residential Properties Adjacent to 1½ Mile Reach of Housatonic River *(GECD710 and GECD720)*
Supplemental Pre-Design Investigation Report - Phase 4 Floodplain Properties, Group 4A

Dear Mr. Lovely:

On June 21, 2005, the General Electric Company (GE) performed supplemental pre-design soil investigations at Parcel I7-1-101 (Fred Garner Park) located within the floodplain adjacent to the 1½ Mile Reach of the Housatonic River. This parcel has been identified as being in the Phase 4, Group 4A floodplain properties (Figure 1) and contains two evaluation (averaging) areas – I7-1-101-East and I7-1-101-West. The supplemental pre-design investigations were conducted in accordance with a document titled *Pre-Design Investigation Report for Phase 4 Floodplain Properties* (PDI Report). GE submitted the PDI Report to the U.S. Environmental Protection Agency (EPA) on April 12, 2005. EPA conditionally approved the PDI Report in a letter to GE dated June 14, 2005. GE is submitting this *Supplemental Pre-Design Investigation Report – Phase 4 Floodplain Properties, Group 4A* (Supplemental PDI Report) to present the results of the June 21, 2005 supplemental pre-design soil investigations and to discuss the adequacy of the existing data set for the performance of future Removal Design/Removal Action (RD/RA) evaluations.

I. Summary of Supplemental Pre-Design Investigations

As indicated in the PDI Report, GE identified three samples within Parcel I7-1-101 where additional sampling was necessary to further define the presence of certain non-PCB constituents and extent of remediation. Specifically, GE proposed supplemental investigations based on analytical results observed in the following three samples: (1) the 0- to 1-foot sample from location 4A-SB-6 in averaging area I7-1-101-East, which had an elevated concentration of arsenic; (2) the 1- to 3-foot sample from location 4A-SB-5 in averaging area I7-1-101-East, which had elevated concentrations of certain polycyclic aromatic hydrocarbons (PAHs); and (3) the 0- to 1-foot sample from location 4A-SB-16 in averaging area I7-1-101-West, which also had elevated concentrations of certain PAHs. In accordance with the PDI Report, GE collected the following samples during supplemental investigations: three surficial samples (0- to 1-foot depth increment) around sample location 4A-SB-6 for arsenic analysis; (2) four samples from the 1- to 3-foot depth increment around sample location 4A-SB-5 for analysis of semivolatile organic compounds (SVOCs) (which include PAHs); and (3) four surficial samples around sample location 4A-SB-16 for SVOC analysis. The results of these samples are provided in Table 1 and the sample locations are shown on Figure 2. Soil boring logs associated with these investigations are included in Appendix A.

II. Data Validation

Analytical results from the June 21, 2005 supplemental investigations within Parcel I7-1-101 have undergone data review validation in accordance with *Section 7.5 of the Field Sampling Plan/Quality Assurance Project Plan* (FSP/QAPP) and the results of the data validation are presented in Appendix B. As discussed in that report, 100% of the analytical results obtained during these investigations are considered usable.

III. Assessment of Additional Data Needs

GE has reviewed the non-PCB data within Parcel I7-1-101 to assess whether the newest data, in combination with the previous sampling results, adequately address the previously identified data needs. This assessment included the performance of evaluations for each of the two evaluation areas within this parcel (I7-1-101-East and I7-1-101-West) on the assumption that soil remediation will be conducted to address the three samples identified in Section I with elevated concentrations of arsenic or PAHs. The results of these evaluations indicated that the average concentrations of certain non-PCB constituents under anticipated post-remediation conditions would be present above the Massachusetts Contingency Plan (MCP) Method 1 "Wave 2" soil standards. Therefore, in accordance with the Consent Decree (CD) and *Statement of Work for Removal Actions Outside the River* (SOW), an area-specific risk assessment will be conducted for each of these averaging areas. Such assessments will be presented in the forthcoming RD/RA Work Plan.

For the purposes of this Supplemental PDI Report, GE has performed a preliminary risk evaluation of the anticipated post-remediation conditions, using the procedures and assumptions required by the SOW. This evaluation has determined that, following the remediation at each evaluation area: (a) the cumulative Excess Lifetime Cancer Risk (ELCR) for each area will not (after rounding) exceed the benchmark ELCR set forth in the SOW of 1×10^{-5}; (b) the non-cancer Hazard Index (HI) will not exceed the benchmark HI of 1 set forth in the SOW; and (c) the average levels of lead will be below the risk-based concentrations that have been approved by EPA. Based on these results, GE has determined that the existing non-PCB data within Parcel I7-1-101 are sufficient to conduct RD/RA evaluations to assess the scope of additional soil remediation beyond the extent of the PCB-related remediation, and that thus additional non-PCB investigations at Parcel I7-1-101 are not necessary.

IV. Schedule

In accordance with EPA's June 14, 2005 conditional approval letter for the PDI Report, GE will submit a RD/RA Work Plan for the Phase 4 floodplain properties to EPA within 45 days of this Supplemental PDI Report.

Please contact Dick Gates or me with any questions.

Sincerely,

Andrew T. Silfer/Acc

Andrew T. Silfer, P.E.
GE Project Coordinator

Attachments
V:\GE_Housatonic_Mile_and_Half\Reports and Presentations\Supp PDI Phase 4 Group 4A\43552196LtrRpt.doc

cc: Dean Tagliaferro, EPA
Rose Howell, EPA*
Holly Inglis, EPA
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Michael Carroll, GE*
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Public Information Repositories
GE Internal Repository

* *cover letter only*

Table

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TABLE 1
SUMMARY OF SUPPLEMENTAL PRE-DESIGN INVESTIGATION DATA

SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A
FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID: / Sample Depth(Feet): / Date Collected:	4A-SB-5E 1-3 06/21/05	4A-SB-5N 1-3 06/21/05	4A-SB-5S 1-3 06/21/05	4A-SB-5W 1-3 06/21/05	4A-SS-6E 0-1 06/21/05	4A-SS-6N 0-1 06/21/05
Semivolatile Organics						
1,2,4,5-Tetrachlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
1,2,4-Trichlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39) J	NA	NA
1,2-Dichlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
1,2-Diphenylhydrazine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
1,3,5-Trinitrobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
1,3-Dichlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
1,3-Dinitrobenzene	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
1,4-Dichlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39) J	NA	NA
1,4-Naphthoquinone	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
1-Naphthylamine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
2,3,4,6-Tetrachlorophenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,4,5-Trichlorophenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,4,6-Trichlorophenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,4-Dichlorophenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,4-Dimethylphenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,4-Dinitrophenol	ND(19) [ND(19)]	ND(1.9)	ND(21)	ND(2.0)	NA	NA
2,4-Dinitrotoluene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,6-Dichlorophenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2,6-Dinitrotoluene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2-Acetylaminofluorene	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
2-Chloronaphthalene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2-Chlorophenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2-Methylnaphthalene	ND(3.7) [ND(3.7)]	ND(0.38)	1.1 J	ND(0.39)	NA	NA
2-Methylphenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
2-Naphthylamine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
2-Nitroaniline	ND(19) [ND(19)]	ND(1.9)	ND(21)	ND(2.0)	NA	NA
2-Nitrophenol	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
2-Picoline	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
3&4-Methylphenol	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
3,3'-Dichlorobenzidine	ND(7.4) [ND(7.5)]	ND(0.76)	ND(8.4)	ND(0.79)	NA	NA
3,3'-Dimethylbenzidine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
3-Methylcholanthrene	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
3-Nitroaniline	ND(19) [ND(19)]	ND(1.9)	ND(21)	ND(2.0)	NA	NA
4,6-Dinitro-2-methylphenol	ND(3.7) J [ND(3.7) J]	ND(0.38) J	ND(4.2)	ND(0.39) J	NA	NA
4-Aminobiphenyl	ND(3.7) J [ND(3.7) J]	ND(0.76) J	ND(4.2) J	ND(0.79) J	NA	NA
4-Bromophenyl-phenylether	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
4-Chloro-3-Methylphenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
4-Chloroaniline	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
4-Chlorobenzilate	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
4-Chlorophenyl-phenylether	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
4-Nitroaniline	ND(3.7) [ND(3.7)]	ND(1.9)	ND(4.2)	ND(2.0)	NA	NA
4-Nitrophenol	ND(19) J [ND(19) J]	ND(1.9) J	ND(21) J	ND(2.0) J	NA	NA
4-Nitroquinoline-1-oxide	ND(3.7) J [ND(3.7) J]	ND(0.76) J	ND(4.2) J	ND(0.79) J	NA	NA
4-Phenylenediamine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
5-Nitro-o-toluidine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
7,12-Dimethylbenz(a)anthracene	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
a,a'-Dimethylphenethylamine	ND(3.7) J [ND(3.7) J]	ND(0.76) J	ND(4.2) J	ND(0.79) J	NA	NA
Acenaphthene	ND(3.7) [ND(3.7)]	ND(0.38)	2.0 J	ND(0.39) J	NA	NA
Acenaphthylene	0.73 J [0.99 J]	ND(0.38)	1.6 J	ND(0.39)	NA	NA
Acetophenone	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Aniline	ND(3.7) J [ND(3.7) J]	ND(0.38) J	ND(4.2) J	ND(0.39) J	NA	NA
Anthracene	0.80 J [1.6 J]	ND(0.38)	3.8 J	ND(0.39)	NA	NA
Aramite	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
Benzidine	ND(7.4) J [ND(7.5) J]	ND(0.76) J	ND(8.4) J	ND(0.79) J	NA	NA
Benzo(a)anthracene	ND(3.7) [5.4]	ND(0.38)	8.7	ND(0.39)	NA	NA
Benzo(a)pyrene	3.0 J [4.8]	ND(0.38)	8.0	ND(0.39)	NA	NA
Benzo(b)fluoranthene	2.4 J [3.4 J]	ND(0.38)	6.2	ND(0.39)	NA	NA
Benzo(g,h,i)perylene	1.5 J [2.3 J]	ND(0.38)	4.6	ND(0.39)	NA	NA
Benzo(k)fluoranthene	2.7 J [4.9]	ND(0.38)	8.6	ND(0.39)	NA	NA
Benzyl Alcohol	ND(7.4) [ND(7.5)]	ND(0.76)	ND(8.4)	ND(0.79)	NA	NA

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SUMMARY OF SUPPLEMENTAL PRE-DESIGN INVESTIGATION DATA

SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A
FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID / Sample Depth(Feet) / Date Collected:	4A-SB-5E 1-3 06/21/05	4A-SB-5N 1-3 06/21/05	4A-SB-5S 1-3 06/21/05	4A-SB-5W 1-3 06/21/05	4A-SS-6E 0-1 06/21/05	4A-SS-6N 0-1 06/21/05
Semivolatile Organics (continued)						
bis(2-Chloroethoxy)methane	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
bis(2-Chloroethyl)ether	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
bis(2-Chloroisopropyl)ether	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
bis(2-Ethylhexyl)phthalate	ND(1.9) [ND(1.9)]	ND(0.38)	ND(2.1)	ND(0.39)	NA	NA
Butylbenzylphthalate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Chrysene	4.0 J [5.7]	ND(0.38)	11	ND(0.39)	NA	NA
Diallate	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
Dibenzo(a,h)anthracene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Dibenzofuran	ND(3.7) [ND(3.7)]	ND(0.38)	1.5 J	ND(0.39)	NA	NA
Diethylphthalate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Dimethylphthalate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Di-n-Butylphthalate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Di-n-Octylphthalate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Diphenylamine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Ethyl Methanesulfonate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Fluoranthene	6.6 [12]	ND(0.38)	22	ND(0.39)	NA	NA
Fluorene	ND(3.7) [0.46 J]	ND(0.38)	2.7 J	ND(0.39)	NA	NA
Hexachlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Hexachlorobutadiene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Hexachlorocyclopentadiene	ND(3.7) J [ND(3.7) J]	ND(0.38) J	ND(4.2) J	ND(0.39) J	NA	NA
Hexachloroethane	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Hexachlorophene	ND(7.4) J [ND(7.5) J]	ND(0.76) J	ND(8.4) J	ND(0.79) J	NA	NA
Hexachloropropene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Indeno(1,2,3-cd)pyrene	1.1 J [1.7 J]	ND(0.38)	3.9 J	ND(0.39)	NA	NA
Isodrin	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Isophorone	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Isosafrole	ND(3.7) J [ND(3.7) J]	ND(0.76) J	ND(4.2) J	ND(0.79) J	NA	NA
Methapyrilene	ND(3.7) J [ND(3.7) J]	ND(0.76) J	ND(4.2) J	ND(0.79) J	NA	NA
Methyl Methanesulfonate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Naphthalene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Nitrobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
N-Nitrosodiethylamine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
N-Nitrosodimethylamine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
N-Nitroso-di-n-butylamine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
N-Nitroso-di-n-propylamine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39) J	NA	NA
N-Nitrosodiphenylamine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
N-Nitrosomethylethylamine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
N-Nitrosomorpholine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
N-Nitrosopiperidine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
N-Nitrosopyrrolidine	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
o,o,o-Triethylphosphorothioate	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
o-Toluidine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
p-Dimethylaminoazobenzene	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
Pentachlorobenzene	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Pentachloroethane	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Pentachloronitrobenzene	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
Pentachlorophenol	ND(19) [ND(19)]	ND(1.9)	ND(21)	ND(2.0) J	NA	NA
Phenacetin	ND(3.7) [ND(3.7)]	ND(0.76)	ND(4.2)	ND(0.79)	NA	NA
Phenanthrene	3.9 [6.6]	ND(0.38)	18	ND(0.39)	NA	NA
Phenol	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Pronamide	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Pyrene	7.5 [12]	ND(0.38)	22	ND(0.39) J	NA	NA
Pyridine	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Safrole	ND(3.7) J [ND(3.7) J]	ND(0.38) J	ND(4.2) J	ND(0.39) J	NA	NA
Thionazin	ND(3.7) [ND(3.7)]	ND(0.38)	ND(4.2)	ND(0.39)	NA	NA
Inorganics						
Arsenic	NA	NA	NA	NA	10.0	18.0

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SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A
FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID: / Sample Depth(Feet): / Date Collected:	4A-SS-6W 0-1 06/21/05	4A-SS-16E 0-1 06/21/05	4A-SS-16N 0-1 06/21/05	4A-SS-16S 0-1 06/21/05	4A-SS-16W 0-1 06/21/05
Semivolatile Organics					
1,2,4,5-Tetrachlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,2,4-Trichlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,2-Dichlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,2-Diphenylhydrazine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,3,5-Trinitrobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,3-Dichlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,3-Dinitrobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,4-Dichlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1,4-Naphthoquinone	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
1-Naphthylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,3,4,6-Tetrachlorophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,4,5-Trichlorophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,4,6-Trichlorophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,4-Dichlorophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,4-Dimethylphenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,4-Dinitrophenol	NA	ND(19)	ND(19)	ND(19)	ND(19)
2,4-Dinitrotoluene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,6-Dichlorophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2,6-Dinitrotoluene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Acetylaminofluorene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Chloronaphthalene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Chlorophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Methylnaphthalene	NA	ND(3.8)	ND(3.8)	0.70 J	ND(3.8)
2-Methylphenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Naphthylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Nitroaniline	NA	ND(19)	ND(19)	ND(19)	ND(19)
2-Nitrophenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
2-Picoline	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
3&4-Methylphenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
3,3'-Dichlorobenzidine	NA	ND(7.7)	ND(7.6)	ND(7.5)	ND(7.7)
3,3'-Dimethylbenzidine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
3-Methylcholanthrene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
3-Nitroaniline	NA	ND(19)	ND(19)	ND(19)	ND(19)
4,6-Dinitro-2-methylphenol	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
4-Aminobiphenyl	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
4-Bromophenyl-phenylether	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
4-Chloro-3-Methylphenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
4-Chloroaniline	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
4-Chlorobenzilate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
4-Chlorophenyl-phenylether	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
4-Nitroaniline	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
4-Nitrophenol	NA	ND(19) J	ND(19) J	ND(19) J	ND(19) J
4-Nitroquinoline-1-oxide	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
4-Phenylenediamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
5-Nitro-o-toluidine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
7,12-Dimethylbenz(a)anthracene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
a,a'-Dimethylphenethylamine	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
Acenaphthene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Acenaphthylene	NA	ND(3.8)	ND(3.8)	7.2	ND(3.8)
Acetophenone	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Aniline	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
Anthracene	NA	0.29 J	ND(3.8)	12	ND(3.8)
Aramite	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Benzidine	NA	ND(7.7) J	ND(7.6) J	ND(7.5) J	ND(7.7) J
Benzo(a)anthracene	NA	0.75 J	0.44 J	18	0.73 J
Benzo(a)pyrene	NA	0.86 J	0.55 J	15	0.60 J
Benzo(b)fluoranthene	NA	0.78 J	0.44 J	9.9	0.51 J
Benzo(g,h,i)perylene	NA	0.55 J	ND(3.8)	7.1	ND(3.8)
Benzo(k)fluoranthene	NA	0.85 J	0.43 J	14	0.53 J
Benzyl Alcohol	NA	ND(7.7)	ND(7.6)	ND(7.5)	ND(7.7)

TABLE 1
SUMMARY OF SUPPLEMENTAL PRE-DESIGN INVESTIGATION DATA

SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A
FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Parameter / Sample ID:	4A-SS-6W	4A-SS-16E	4A-SS-16N	4A-SS-16S	4A-SS-16W
Sample Depth(Feet):	0-1	0-1	0-1	0-1	0-1
Date Collected:	06/21/05	06/21/05	06/21/05	06/21/05	06/21/05
Semivolatile Organics (continued)					
bis(2-Chloroethoxy)methane	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
bis(2-Chloroethyl)ether	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
bis(2-Chloroisopropyl)ether	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
bis(2-Ethylhexyl)phthalate	NA	ND(1.9)	ND(1.9)	ND(1.9)	ND(1.9)
Butylbenzylphthalate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Chrysene	NA	0.91 J	0.55 J	16	0.91 J
Diallate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Dibenzo(a,h)anthracene	NA	ND(3.8)	ND(3.8)	1.3 J	ND(3.8)
Dibenzofuran	NA	ND(3.8)	ND(3.8)	4.5	ND(3.8)
Diethylphthalate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Dimethylphthalate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Di-n-Butylphthalate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Di-n-Octylphthalate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Diphenylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Ethyl Methanesulfonate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Fluoranthene	NA	2.0 J	0.88 J	46	1.4 J
Fluorene	NA	ND(3.8)	ND(3.8)	3.9	ND(3.8)
Hexachlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Hexachlorobutadiene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Hexachlorocyclopentadiene	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
Hexachloroethane	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Hexachlorophene	NA	ND(7.7) J	ND(7.6) J	ND(7.5) J	ND(7.7) J
Hexachloropropene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Indeno(1,2,3-cd)pyrene	NA	ND(3.8)	ND(3.8)	5.9	ND(3.8)
Isodrin	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Isophorone	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Isosafrole	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
Methapyrilene	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
Methyl Methanesulfonate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Naphthalene	NA	ND(3.8)	ND(3.8)	1.1 J	ND(3.8)
Nitrobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosodiethylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosodimethylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitroso-di-n-butylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitroso-di-n-propylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosodiphenylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosomethylethylamine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosomorpholine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosopiperidine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
N-Nitrosopyrrolidine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
o,o,o-Triethylphosphorothioate	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
o-Toluidine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
p-Dimethylaminoazobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Pentachlorobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Pentachloroethane	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Pentachloronitrobenzene	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Pentachlorophenol	NA	ND(19)	ND(19)	ND(19)	ND(19)
Phenacetin	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Phenanthrene	NA	0.89 J	ND(3.8)	48	1.0 J
Phenol	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Pronamide	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Pyrene	NA	1.9 J	0.79 J	38	1.3 J
Pyridine	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Safrole	NA	ND(3.8) J	ND(3.8) J	ND(3.7) J	ND(3.8) J
Thionazin	NA	ND(3.8)	ND(3.8)	ND(3.7)	ND(3.8)
Inorganics					
Arsenic	16.0 [10.0]	NA	NA	NA	NA

TABLE 1
SUMMARY OF SUPPLEMENTAL PRE-DESIGN INVESTIGATION DATA

SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A
FLOODPLAIN RESIDENTIAL AND NON-RESIDENTIAL PROPERTIES ADJACENT TO 1 1/2 MILE REACH
GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in dry weight parts per million, ppm)

Notes:

1. Samples were collected by Blasland, Bouck & Lee, Inc., and submitted to SGS Environmental Services, Inc. for analysis of semivolatiles and arsenic.
2. Samples have been validated as per Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP), General Electric Company, Pittsfield, Massachusetts, Blasland Bouck & Lee, Inc. (approved May 29, 2004 and resubmitted June 19, 2004).
3. NA - Not Analyzed.
4. ND - Analyte was not detected. The number in parentheses is the associated detection limit.
5. Field duplicate sample results are presented in brackets.

Data Qualifiers:

Organics (semivolatiles)

J - Indicates that the associated numerical value is an estimated concentration.

Figures

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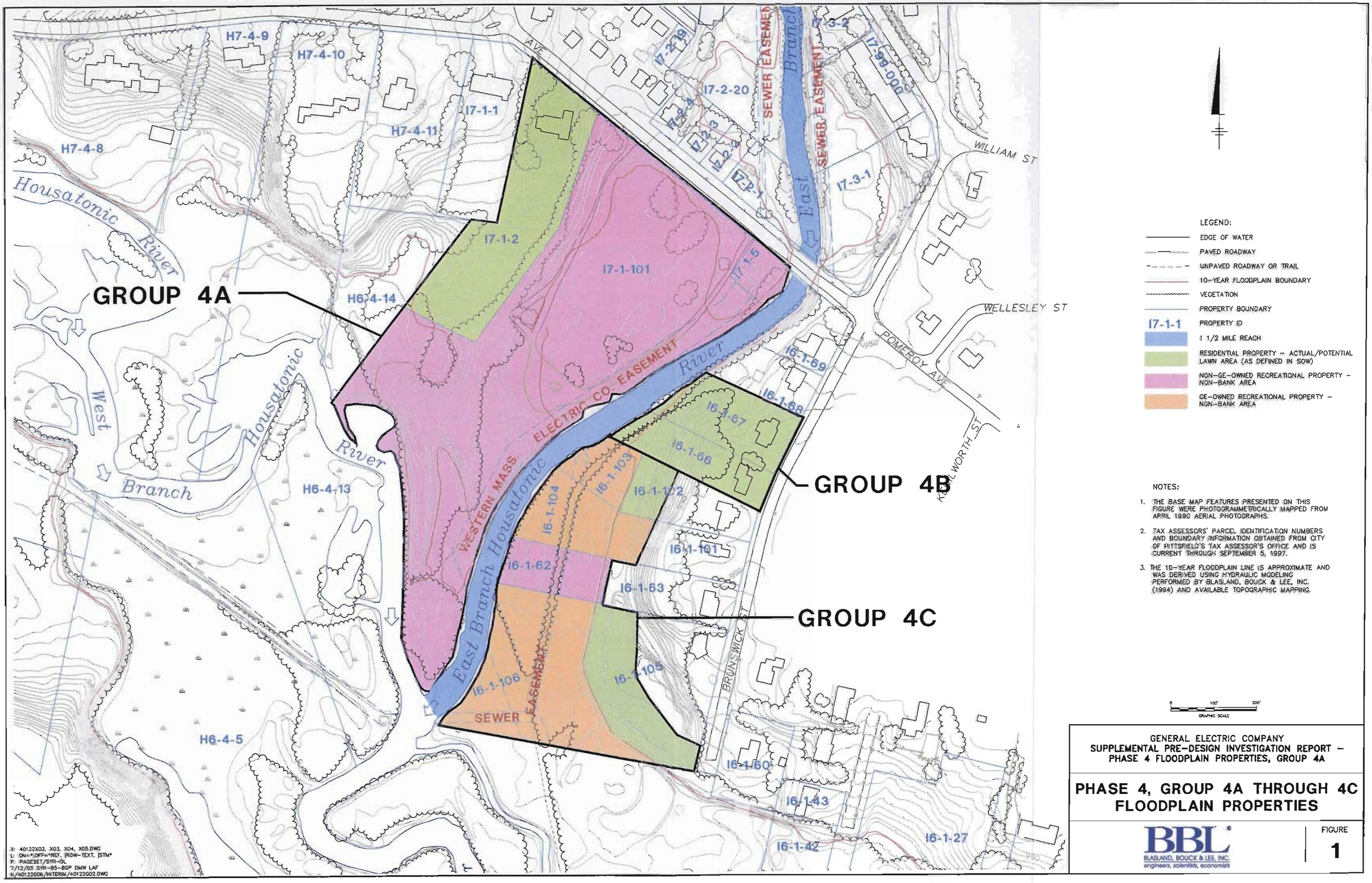

NOTES:

1. THE BASE MAP FEATURES PRESENTED ON THIS FIGURE WERE PHOTOGRAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS.
2. TAX ASSESSORS' PARCEL IDENTIFICATION NUMBERS AND BOUNDARY INFORMATION OBTAINED FROM CITY OF PITTSFIELD'S TAX ASSESSOR'S OFFICE AND IS CURRENT THROUGH SEPTEMBER 5, 1997.
3. THE 10-YEAR FLOODPLAIN LINE IS APPROXIMATE AND WAS DERIVED USING HYDRAULIC MODELING PERFORMED BY BLASLAND, BOUCK & LEE, INC. (1994) AND AVAILABLE TOPOGRAPHIC MAPPING.

0 150' 200'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT -
PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A

PHASE 4, GROUP 4A THROUGH 4C FLOODPLAIN PROPERTIES

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FIGURE 1

X: 40122X02, X03, X04, X05.DWG
L: ON=*;OFF=*REF, |ROW-TEXT, |STM*
R: PAGESET/SYR-BL
7/12/05 SYR-BS-BCP DMW LAF
N:\40122B06\INTERIM\40122G02.DWG

LEGEND

970	TOPOGRAPHIC CONTOUR
	APPROXIMATE PARCEL BOUNDARY
	APPROXIMATE HORIZONTAL LIMITS OF AVERAGING AREA
I7-1-5	PROPERTY PARCEL ID
F0219203	APPENDIX IX+3 SOIL BORING LOCATION
4A-SS-19	APPENDIX IX+3 SURFACE SOIL SAMPLE LOCATION
4A-SB-15S	SUPPLEMENTAL APPENDIX IX+3 SOIL BORING LOCATION
4A-SS-13N	SUPPLEMENTAL APPENDIX IX+3 SURFACE SOIL SAMPLE LOCATION
	AREA TO BE ADDRESSED BY EPA IN 1 1/2 MILE REACH REMOVAL AREA
	BOUNDARY OF FLOODPLAIN PROPERTIES (SEE NOTE 4)

FIGURE NOTES:

1. THE BASE MAP FEATURES (EXCLUDING THE RIVERS) PRESENTED ON THIS FIGURE ARE FROM SURVEY BY HILL ENGINEERS, ARCHITECTS AND PLANNERS, FILE NO. GE1097-1-CX101, DATED 2/18/05. RIVER LOCATIONS WERE PHOTOGAMMETRICALLY MAPPED FROM APRIL 1990 AERIAL PHOTOGRAPHS. RIVER LOCATIONS ARE APPROXIMATE.
2. PARCEL IDENTIFICATION AND BOUNDARIES ARE BASED ON CITY OF PITTSFIELD TAX ASSESSORS' INFORMATION.
3. LIMIT OF EPA RESPONSE ACTIONS ASSOCIATED WITH THE 1 1/2 MILE REACH IS BASED ON ELECTRONIC FILE RECEIVED FROM EPA ON MARCH 11, 2005.
4. SAMPLE LOCATIONS ARE APPROXIMATE.

0 80' 160'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A

SUMMARY OF APPENDIX IX+3 SOIL SAMPLING LOCATIONS FOR GROUP 4A

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FIGURE 2

X: 40122X06.DWG
L: ON=* OFF=*REF, UTILITY-BAND, IXFLOOD
P: PAGESET/SYR-DL
7/12/05 SYR-85-NES DMW LAF
N/40122005/RDRA/40122B11.DWG

Appendices

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Appendix A

Soil Boring Logs

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Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 528292.1 **Easting:** 127584.3 **Casing Elevation:** NA **Borehole Depth:** 3' below grade **Surface Elevation:** 965.3 **Descriptions By:** PF	**Boring ID:** 4A-SB-5N **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	965							
		1	1-3	2.0	0.0		Brown fine SAND and SILT, trace medium to fine Gravel.	Borehole backfilled with Bentonite.
							Gray SILT and CLAY.	
5	960							
10	955							
15	950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 1-3': SVOCs.
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 528242 **Easting:** 127584.4 **Casing Elevation:** NA **Borehole Depth:** 3' below grade **Surface Elevation:** 965.1 **Descriptions By:** PF	**Boring ID:** 4A-SB-5S **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0 / 965	1	1-3	2.0	0.0		Dark brown fine SAND and SILT, some fine Gravel.	Borehole backfilled with Bentonite.
5 / 960							
10 / 955							
15 / 950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 1-3': SVOCs.
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05
Drilling Company: BBL
Driller's Name: ASA/RCD
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Power Probe
Sample Method: 4' Macrocore

Northing: 528267.1
Easting: 127609.4
Casing Elevation: NA

Borehole Depth: 3' below grade
Surface Elevation: 965

Descriptions By: PF

Boring ID: 4A-SB-5E

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0 965							
	1	1-3	2.0	0.0		Dark brown fine SAND and SILT, trace fine Gravel.	Borehole backfilled with Bentonite.
5 960							
10955							
15950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 1-3': SVOCs;
Duplicate Sample ID: 4A-SB-DUP-1 (SVOCs, 1-3').
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 528267.2 **Easting:** 127559.4 **Casing Elevation:** NA **Borehole Depth:** 3' below grade **Surface Elevation:** 965.3 **Descriptions By:** PF	**Boring ID:** 4A-SB-5W **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0 / 965							Borehole backfilled with Bentonite.
	1	1-3	2.0	0.0		Light brown fine SAND and SILT, trace medium to fine Gravel.	
						Light gray fine SILT and CLAY.	
5 / 960							
10 / 955							
15 / 950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 1-3': SVOCs;
MS/MSD collected (1-3').
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05
Drilling Company: BBL
Driller's Name: ASA/RCD
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Power Probe
Sample Method: 4' Macrocore

Northing: 528307
Easting: 127720.8
Casing Elevation: NA

Borehole Depth: 1' below grade
Surface Elevation: 964.9

Descriptions By: PF

Boring ID: 4A-SS-6N

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	965	1	0-1	1.0	0.0		Dark brown fine SAND and SILT, trace fine Gravel.	Borehole backfilled with Bentonite.
5	960							
10	955							
15	950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': Arsenic;
MS/MSD collected (0-1').
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05
Drilling Company: BBL
Driller's Name: ASA/RCD
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Power Probe
Sample Method: 4' Macrocore

Northing: 127746.1
Easting: 528288.2
Casing Elevation: NA

Borehole Depth: 1' below grade
Surface Elevation: 965

Descriptions By: PF

Boring ID: 4A-SS-6E
Client: General Electric Company
Location: Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0 965	1	0-1	1.0	0.0		Dark brown fine to medium SAND and SILT, trace fine Gravel.	Borehole backfilled with Bentonite.
5 960							
10955							
15950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': Arsenic.
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 528277 **Easting:** 127701.7 **Casing Elevation:** NA **Borehole Depth:** 1' below grade **Surface Elevation:** 965.2 **Descriptions By:** PF	**Boring ID:** 4A-SS-6W **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0	965	1	0-1	1.0	0.0		Dark brown fine SAND and SILT.	Borehole backfilled with Bentonite.
5	960							
10	955							
15	950							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': Arsenic;
Duplicate Sample ID: 4A-SS-DUP-2 (Arsenic, 0-1').
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 527980.2 **Easting:** 127333.6 **Casing Elevation:** NA **Borehole Depth:** 1' below grade **Surface Elevation:** 979.5 **Descriptions By:** PF	**Boring ID:** 4A-SS-16N **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
980 0							
	1	0-1	1.0	0.0		Medium brown fine SAND and SILT, trace fine Gravel.	Borehole backfilled with Bentonite.
975 5							
970 10							
965 15							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': SVOCs.
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 527930.2 **Easting:** 127334 **Casing Elevation:** NA **Borehole Depth:** 1' below grade **Surface Elevation:** 980.5 **Descriptions By:** PF	**Boring ID:** 4A-SS-16S **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
0 980	1	0-1	1.0	0.0		Medium brown fine SAND and SILT, trace fine Gravel.	Borehole backfilled with Bentonite.
5 975							
10 970							
15 965							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': SVOCs.
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05
Drilling Company: BBL
Driller's Name: ASA/RCD
Drilling Method: Direct Push
Auger Size: NA
Rig Type: Power Probe
Sample Method: 4' Macrocore

Northing: 527955.4
Easting: 127358.8
Casing Elevation: NA

Borehole Depth: 1' below grade
Surface Elevation: 979.4

Descriptions By: PF

Boring ID: 4A-SS-16E

Client: General Electric Company

Location: Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
980 / 0	1	0-1	1.0	0.0		Dark brown fine SAND and SILT, trace fine Gravel.	Borehole backfilled with Bentonite.
975 / 5							
970 / 10							
965 / 15							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': SVOCs.
The water table was not encountered during boring installation.

Date Start/Finish: 6/21/05 **Drilling Company:** BBL **Driller's Name:** ASA/RCD **Drilling Method:** Direct Push **Auger Size:** NA **Rig Type:** Power Probe **Sample Method:** 4' Macrocore	**Northing:** 527955.3 **Easting:** 127308.9 **Casing Elevation:** NA **Borehole Depth:** 1' below grade **Surface Elevation:** 979.6 **Descriptions By:** PF	**Boring ID:** 4A-SS-16W **Client:** General Electric Company **Location:** Housatonic River 1 1/2 Mile Phase 4 Floodplain Properties - Group 4A

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Boring Construction
980 0							
	1	0-1	1.0	0.0		Dark brown fine to medium SAND and SILT, trace fine Gravel and Roots.	Borehole backfilled with Bentonite.
975 5							
970 10							
965 15							

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Remarks: bgs = below ground surface; NA = Not Applicable/Available.
Analyses: 0-1': SVOCs.
The water table was not encountered during boring installation.

Appendix B

Soil Sampling Data Validation Report

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APPENDIX B
SOIL SAMPLING DATA VALIDATION REPORT
SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS

1.0 General

This appendix summarizes the Tier I and Tier II data reviews performed for soil samples collected during supplemental pre-design investigation activities conducted at Parcel I7-1-101 within the Group 4A floodplain properties located adjacent to the 1½ Mile Reach of the Housatonic River in Pittsfield, Massachusetts. The samples were analyzed for various constituents listed in Appendix IX of 40 CFR Part 264, plus two additional constituents - benzidine and 1,2-diphenylhydrazine, by SGS Environmental Services, Inc. (formerly CT&E) of Charleston, West Virginia. Data validation was performed for ten semi-volatile organic compound (SVOC) samples and five arsenic samples.

2.0 Data Evaluation Procedures

This attachment outlines the applicable quality control criteria utilized during the data review process and any deviations from those criteria. The data review was conducted in accordance with the following documents:

- *Field Sampling Plan/Quality Assurance Project Plan, General Electric Company, Pittsfield, Massachusetts*, Blasland, Bouck & Lee, Inc. (BBL; FSP/QAPP, approved May 25, 2004 and resubmitted June 15, 2004);
- *Region I Tiered Organic and Inorganic Data Validation Guidelines*, USEPA Region I (July 1, 1993);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses,* USEPA Region I (June 13, 1988) (Modified February 1989);
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (February 1, 1988) (Modified November 1, 1988); and
- *Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, USEPA Region I (Draft, December 1996).

A tabulated summary of the Tier I and Tier II data evaluations is presented in Table B-1. Each sample subjected to evaluation is listed in Table B-1 to document that data review was performed, as well as present the highest level of data validation (Tier I or Tier II) that was applied. Samples that required data qualification are listed separately for each parameter (compound or analyte) that required qualification.

The following data qualifiers were used in this data evaluation.

J The compound was positively identified, but the associated numerical value is an estimated concentration. This qualifier is used when the data evaluation procedure identifies a deficiency in the data generation process. This qualifier is also used when a compound is detected at an estimated concentration less than the corresponding practical quantitation limit (PQL).

U The compound was analyzed for, but was not detected. The sample quantitation limit is presented and adjusted for dilution and (for solid samples only) percent moisture. Non-detect sample results are presented as ND(PQL) within this report and in Table B-1 for consistency with documents previously prepared for investigations conducted at this site.

UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is estimated and may or may not represent the actual level of quantitation. Non-detect sample results that required qualification are presented as ND(PQL) J within this report and in Table B-1 for consistency with documents previously prepared for this investigation.

3.0 Data Validation Procedures

The FSP/QAPP provides (in Section 7.5) that all analytical data will be validated to a Tier I level following the procedures presented in the *Region I Tiered Organic and Inorganic Data Validation Guidelines* (USEPA guidelines). Accordingly, 100% of the analytical data for these investigations were subjected to Tier I review. The Tier I review consisted of a completeness evidence audit, as outlined in the *USEPA Region I CSF Completeness Evidence Audit Program* (USEPA Region I, 7/31/91), to ensure that all laboratory data and documentation were present. In the event data packages were determined to be incomplete, the missing information was requested from the laboratory. Upon completion of the Tier I review, the data packages complied with the USEPA Region I Tier I data completeness requirements. A tabulated summary of the samples subjected to Tier I and Tier II data evaluation is presented in the following table.

Summary of Samples Subjected to Tier I and Tier II Data Validation

Parameter	Tier I Only			Tier I &Tier II			Total
	Samples	Duplicates	Blanks	Samples	Duplicates	Blanks	
SVOCs	0	0	0	8	1	1	10
Metals	0	0	0	3	1	1	5
Total	**0**	**0**	**0**	**11**	**2**	**2**	**15**

A Tier II review was performed to resolve data usability limitations identified from laboratory qualification of the data during the Tier I data review. The Tier II data review consisted of a review of all data package summary forms for identification of quality assurance/quality control (QA/QC) deviations and qualification of the data according to the Region I Data Validation Functional Guidelines. The Tier II review resulted in the qualification of data for several samples due to minor QA/QC deficiencies. Additionally, all field duplicates were examined for relative percent difference (RPD) compliance with the criteria specified in the FSP/QAPP.

When qualification of the sample data was required, the sample results associated with a QA/QC parameter deviation were qualified in accordance with the procedures outlined in USEPA Region I data validation guidance documents. When the data validation process identified several quality control deficiencies, the cumulative effect of the various deficiencies was employed in assigning the final data qualifier. A summary of the QA/QC parameter deviations that resulted in data qualification is presented below for each analytical method.

4.0 Data Review

The initial calibration criterion for organic analyses requires that the average relative response factor (RRF) has a value greater than 0.05. Sample results were qualified as estimated (J) when this criterion was not met. The compound that did not meet the initial calibration criterion and the number of samples qualified are presented in the following table.

Compound Qualified Due to Initial Calibration Deviations (RRF)

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	Safrole	10	J

Several of the organic compounds (including the compound presented in the above table detailing RRF deviations) exhibit instrument response factors (RFs) below the USEPA Region I minimum value of 0.05, but meet the analytical method criterion which does not specify minimum RFs for these compounds. These compounds were analyzed by the laboratory at a higher concentration than the compounds that normally exhibit RFs greater than the USEPA Region I minimum value of 0.05 in an effort to demonstrate acceptable response. USEPA Region I guidelines state that non-detect compound results associated with a RF less than the minimum value of 0.05 are to be rejected (R). However, in the case of these select organic compounds, the RF is an inherent problem with the current analytical methodology; therefore, the non-detect sample results were qualified as estimated (J).

Initial calibration criterion for SVOCs requires that the percent relative standard deviation (%RSD) must be less than or equal to 30%. Sample data for detected and non-detected compounds with %RSD values greater than 30% were qualified as estimated (J). The compound that exceeded initial calibration criterion and the number of samples qualified due those exceeded are presented in the following table.

Compound Qualified Due to Initial Calibration %RSD Deviations

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	Hexachlorophene	10	J

Initial calibration criterion for organic compounds requires that the correlation coefficient of the initial calibration must be greater than or equal to 0.99. Sample data for compounds associated with a correlation coefficient value less than 0.99 were qualified as estimated (J). The compound that exceeded initial calibration criterion and the number of samples qualified due to those deviations are presented in the following table.

Compound Qualified Due to Initial Calibration Correlation Coefficients Deviations

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	Benzidine	10	J

The continuing calibration criterion requires that the percent difference (%D) between the initial calibration RRF and the continuing calibration RRF for SVOCs be less than 25%. Sample data for detect and non-detect compounds with %D values that exceeded the continuing calibration criteria were qualified as estimated (J). A summary of the compounds that exceeded the continuing calibration criterion and the number of samples qualified due to those deviations are presented in the following table.

Compounds Qualified Due to Continuing Calibration of %D Values

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	2,4-Dinitrophenol	1	J
	4,6-Dinitro-2-methylphenol	8	J
	4-Aminobiphenyl	10	J
	4-Nitrophenol	9	J
	4-Nitroquinoline-1-oxide	10	J
	a,a'-Dimethylphenethylamine	10	J
	Aniline	10	J
	Benzidine	10	J
	Hexachlorocyclopentadiene	10	J
	Hexachlorophene	10	J
	Isosafrole	10	J
	Methapyrilene	10	J
	Safrole	10	J

Matrix spike/matrix spike duplicate (MS/MSD) sample analysis recovery criteria for organics require that the MS/MSD recovery be within the laboratory-generated QC control limits specified on the MS reporting form. Associated organic sample results with MS/MSD recoveries that were less than the laboratory-generated QC control limits were qualified as estimated (J). The compounds that did not meet MS/MSD recovery criteria and the number of samples qualified due to those deviations are presented in the following table.

Compounds Qualified Due to MS/MSD Recovery Deviations

Analysis	Compound	Number of Affected Samples	Qualification
SVOCs	1,2,4-Trichlorobenzene	1	J
	1,4-Dichlorobenzene	1	J
	Acenaphthene	1	J
	N-Nitroso-di-n-propylamine	1	J
	Pentachlorophenol	1	J
	Pyrene	1	J

5.0 Overall Data Usability

This section summarizes the analytical data in terms of its completeness and usability for site characterization purposes. Data completeness is defined as the percentage of sample results that have been determined to be usable during the data validation process. The percent usability calculation included analyses evaluated under both the Tier I and Tier II data validation reviews. Data completeness with respect to usability was calculated separately for inorganic and each of the organic analysis. The percent usability calculation also includes quality control samples collected to aid in the evaluation of data usability. Therefore, field/equipment blank, trip blank, and field duplicate data determined to be unusable as a result of the validation process are represented in the percent usability value tabulated in the following table.

Data Usability

Parameter	Percent Usability	Rejected Data
Inorganics	100	None
SVOCs	100	None

The data package completeness, as determined from the Tier I data review, was used in combination with the data quality deviations identified during the Tier II data review to determine overall data quality. As specified in the FSP/QAPP, the overall precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters determined from the Tier I and Tier II data reviews were used as indicators of overall data quality. These parameters were assessed through an evaluation of the results of the field and laboratory QA/QC sample analyses to provide a measure of compliance of the analytical data with the Data Quality Objectives (DQOs) specified in the FSP/QAPP. Therefore, the following sections present summaries of the PARCC parameters assessment with regard to the DQOs specified in the FSP/QAPP.

5.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is a quantitative measure of the variability of a group of measurements compared to their average value. For this investigation, precision was defined as the RPD between duplicate sample results. The duplicate samples used to evaluate precision included laboratory duplicates, field duplicates, and MS/MSD samples. For this analytical program, none of the data required qualification due to laboratory duplicates, field duplicates or MS/MSD RPD deviations.

5.2 Accuracy

Accuracy measures the bias in an analytical system or the degree of agreement of a measurement with a known reference value. For this investigation, accuracy was defined as the percent recovery of QA/QC samples that were spiked with a known concentration of an analyte or compound of interest. The QA/QC samples used to evaluate analytical accuracy included instrument calibration, internal standards, Laboratory Control Standards (LCSs), MS/MSD samples, CRDL samples, and surrogate compound recoveries. For this analytical program, 12.8% of the data required qualification due to instrument calibration deviations, and 0.52% of the data required qualification due to MS/MSD recovery deviations. None of the data required qualification due to internal standards deviations, CRDL deviations, surrogate compound recovery deviations or LCS recovery deviations.

5.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter, which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. This parameter has been addressed by collecting samples at locations specified in MDEP-approved work plans, and by following the procedures for sample collection/analyses that were described in the FSP/QAPP. Additionally, the analytical program used procedures consistent with USEPA-approved analytical methodology. A QA/QC parameter that is an indicator of the representativeness of a sample is holding time. Holding time criteria are established to maintain the samples in a state that is representative of the in-situ field conditions before analysis. For this analytical program, none of the data required qualification due to holding time deviations.

5.4 Comparability

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. This goal was achieved through the use of the standardized techniques for sample collection and analysis presented in the FSP/QAPP. The USEPA SW-846[1] analytical methods presented in the FSP/QAPP are updated on occasion by the USEPA to benefit from recent technological advancements in analytical chemistry and instrumentation. In most cases, the method upgrades include the incorporation of new technology that improves the sensitivity and stability of the instrumentation or allows the laboratory to increase throughput without hindering accuracy and precision. Overall, the analytical methods for this investigation have remained consistent in their general approach through continued use of the basic analytical techniques (e.g., sample extraction/preparation, instrument calibration, QA/QC procedures). Through this use of consistent base analytical procedures and by requiring that updated procedures meet the QA/QC criteria specified in the FSP/QAPP, the analytical data from past, present, and future sampling events will be comparable to allow for qualitative and quantitative assessment of site conditions.

5.5 Completeness

Completeness is defined as the percentage of measurements that are judged to be valid or usable to meet the prescribed DQOs. The completeness criterion is essentially the same for all data uses -- the generation of a sufficient amount of valid data. This analytical data set had an overall usability of 100%.

[1] Test Methods for evaluating Solid Waste, SW-846, USEPA, Final Update III, December 1996.

TABLE B - 1
ANALYTICAL DATA VALIDATION SUMMARY
SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
Metals											
5F0P413	4A-SS-6E (0 - 1)	6/21/2005	Soil	Tier II	No						
5F0P413	4A-SS-6N (0 - 1)	6/21/2005	Soil	Tier II	No						
5F0P413	4A-SS-6W (0 - 1)	6/21/2005	Soil	Tier II	No						
5F0P413	4A-SS-DUP-2 (0 - 1)	6/21/2005	Soil	Tier II	No						
5F0P413	RINSE BLANK-1	6/21/2005	Water	Tier II	No						4A-SS-6W
SVOCs											
5F0P413	4A-SB-5E (1 - 3)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(3.7) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(3.7) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(19) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(3.7) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(3.7) J	
						Aniline	CCAL %D	50.7%	<25%	ND(3.7) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(7.4) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(7.4) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(3.7) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(7.4) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(7.4) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(3.7) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(3.7) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(3.7) J	
						Safrole	CCAL %D	99.9%	<25%	ND(3.7) J	
5F0P413	4A-SB-5N (1 - 3)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(0.38) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(0.76) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(1.9) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(0.76) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(0.76) J	
						Aniline	CCAL %D	50.7%	<25%	ND(0.38) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(0.76) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(0.76) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(0.38) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(0.76) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(0.76) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(0.76) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(0.76) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(0.38) J	
						Safrole	CCAL %D	99.9%	<25%	ND(0.38) J	
5F0P413	4A-SB-5S (1 - 3)	6/21/2005	Soil	Tier II	Yes	4-Aminobiphenyl	CCAL %D	43.6%	<25%	ND(4.2) J	
						4-Nitrophenol	CCAL %D	31.5%	<25%	ND(21) J	
						4-Nitroquinoline-1-oxide	CCAL %D	39.5%	<25%	ND(4.2) J	
						a,a'-Dimethylphenethylamine	CCAL %D	36.5%	<25%	ND(4.2) J	
						Aniline	CCAL %D	49.6%	<25%	ND(4.2) J	
						Benzidine	CCAL %D	65.8%	<25%	ND(8.4) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(8.4) J	
						Hexachlorocyclopentadiene	CCAL %D	34.3%	<25%	ND(4.2) J	
						Hexachlorophene	CCAL %D	99.3%	<25%	ND(8.4) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(8.4) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(4.2) J	
						Methapyrilene	CCAL %D	37.7%	<25%	ND(4.2) J	
						Safrole	CCAL %D	99.9%	<25%	ND(4.2) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(4.2) J	
5F0P413	4A-SB-5W (1 - 3)	6/21/2005	Soil	Tier II	Yes	1,2,4-Trichlorobenzene	MS/MSD %R	20.5%, 19.6%	38% to 107%, 38% to 107%	ND(0.39) J	
						1,4-Dichlorobenzene	MS/MSD %R	17.1%, 17.4%	28% to 104%, 28% to 104%	ND(0.39) J	
						4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(0.39) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(0.79) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(2.0) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(0.79) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(0.79) J	
						Acenaphthene	MS/MSD %R	23.6%, 27.0%	31% to 137%, 31% to 137%	ND(0.39) J	
						Aniline	CCAL %D	50.7%	<25%	ND(0.39) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(0.79) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(0.79) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(0.39) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(0.79) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(0.79) J	

TABLE B - 1
ANALYTICAL DATA VALIDATION SUMMARY
SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
SVOCs (continued)											
5F0P413	4A-SB-5W (1 - 3)	6/21/2005	Soil	Tier II	Yes	Isosafrole	CCAL %D	99.9%	<25%	ND(0.79) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(0.79) J	
						N-Nitroso-di-n-propylamine	MS/MSD %R	32.6%, 29.2%	41% to 126%, 41% to 126%	ND(0.39) J	
						Pentachlorophenol	MSD %R	19.2%	20% to 105%	ND(2.0) J	
						Pyrene	MS/MSD %R	26.2%, 28.7%	35% to 142%, 35% to 142%	ND(0.39) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(0.39) J	
						Safrole	CCAL %D	99.9%	<25%	ND(0.39) J	
5F0P413	4A-SB-DUP-1 (1 - 3)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(3.7) J	4A-SB-5E
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(3.7) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(19) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(3.7) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(3.7) J	
						Aniline	CCAL %D	50.7%	<25%	ND(3.7) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(7.5) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(7.5) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(3.7) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(7.5) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(7.5) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(3.7) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(3.7) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(3.7) J	
						Safrole	CCAL %D	99.9%	<25%	ND(3.7) J	
5F0P413	4A-SS-16E (0 - 1)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(3.8) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(3.8) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(19) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(3.8) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(3.8) J	
						Aniline	CCAL %D	50.7%	<25%	ND(3.8) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(7.7) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(7.7) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(3.8) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(7.7) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(7.7) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(3.8) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(3.8) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(3.8) J	
						Safrole	CCAL %D	99.9%	<25%	ND(3.8) J	
5F0P413	4A-SS-16N (0 - 1)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(3.8) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(3.8) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(19) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(3.8) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(3.8) J	
						Aniline	CCAL %D	50.7%	<25%	ND(3.8) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(7.6) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(7.6) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(3.8) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(7.6) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(7.6) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(3.8) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(3.8) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(3.8) J	
						Safrole	CCAL %D	99.9%	<25%	ND(3.8) J	
5F0P413	4A-SS-16S (0 - 1)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(3.7) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(3.7) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(19) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(3.7) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(3.7) J	
						Aniline	CCAL %D	50.7%	<25%	ND(3.7) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(7.5) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(7.5) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(3.7) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(7.5) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(7.5) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(3.7) J	

TABLE B - 1
ANALYTICAL DATA VALIDATION SUMMARY
SUPPLEMENTAL PRE-DESIGN INVESTIGATION REPORT - PHASE 4 FLOODPLAIN PROPERTIES, GROUP 4A

GENERAL ELECTRIC COMPANY - PITTSFIELD, MASSACHUSETTS
(Results are presented in parts per million, ppm)

Sample Delivery Group No.	Sample ID	Date Collected	Matrix	Validation Level	Qualification	Compound	QA/QC Parameter	Value	Control Limits	Qualified Result	Notes
SVOCs (continued)											
5F0P413	4A-SS-16S (0 - 1)	6/21/2005	Soil	Tier II	Yes	Methapyrilene	CCAL %D	41.6%	<25%	ND(3.7) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(3.7) J	
						Safrole	CCAL %D	99.9%	<25%	ND(3.7) J	
5F0P413	4A-SS-16W (0 - 1)	6/21/2005	Soil	Tier II	Yes	4,6-Dinitro-2-methylphenol	CCAL %D	25.9%	<25%	ND(3.8) J	
						4-Aminobiphenyl	CCAL %D	34.1%	<25%	ND(3.8) J	
						4-Nitrophenol	CCAL %D	99.9%	<25%	ND(19) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.7%	<25%	ND(3.8) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.4%	<25%	ND(3.8) J	
						Aniline	CCAL %D	50.7%	<25%	ND(3.8) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(7.7) J	
						Benzidine	CCAL %D	72.4%	<25%	ND(7.7) J	
						Hexachlorocyclopentadiene	CCAL %D	39.3%	<25%	ND(3.8) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(7.7) J	
						Hexachlorophene	CCAL %D	100.0%	<25%	ND(7.7) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(3.8) J	
						Methapyrilene	CCAL %D	41.6%	<25%	ND(3.8) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(3.8) J	
						Safrole	CCAL %D	99.9%	<25%	ND(3.8) J	
5F0P413	RINSE BLANK-1	6/21/2005	Water	Tier II	Yes	2,4-Dinitrophenol	CCAL %D	37.4%	<25%	ND(0.050) J	
						4-Aminobiphenyl	CCAL %D	27.6%	<25%	ND(0.010) J	
						4-Nitroquinoline-1-oxide	CCAL %D	46.4%	<25%	ND(0.010) J	
						a,a'-Dimethylphenethylamine	CCAL %D	37.0%	<25%	ND(0.010) J	
						Aniline	CCAL %D	47.4%	<25%	ND(0.010) J	
						Benzidine	ICAL Linear Regression	0.412	>0.99	ND(0.020) J	
						Benzidine	CCAL %D	70.7%	<25%	ND(0.020) J	
						Hexachlorocyclopentadiene	CCAL %D	46.2%	<25%	ND(0.010) J	
						Hexachlorophene	ICAL %RSD	34.5%	<30%	ND(0.020) J	
						Hexachlorophene	CCAL %D	99.6%	<25%	ND(0.020) J	
						Isosafrole	CCAL %D	99.9%	<25%	ND(0.010) J	
						Methapyrilene	CCAL %D	41.5%	<25%	ND(0.010) J	
						Safrole	ICAL RRF	0.043	>0.05	ND(0.010) J	
						Safrole	CCAL %D	99.9%	<25%	ND(0.010) J	